

# Lucent Compact Switch



The Lucent Technologies Compact Switch offers an ideal solution for service providers who need a simple solution for single switch applications. Delivering a host of legacy and next generation features and capabilities in a single chassis, the Compact Switch offers quick and easy installation and outstanding reliability. Multiple applications can be simultaneously supported on the same platform, furnishing providers with a broad range of business and residential service offerings as well as compelling economics. Deployed in numerous domestic and international networks, the Compact Switch provides the ideal solution for carriers who wish to offer next-generation packet-based services in addition to traditional residential or business services. The Compact Switch is equally at home in greenfield or cap-and-grow environments.

## Benefits

- Full softswitch performance in a single platform
- Built-in CLASS/Custom calling features are available to both TDM and IP subscribers; the Lucent Feature Server is available for delivering advanced services
- Supports a rich mix of legacy and VoIP applications concurrently
- Industry-leading density reduces power and space requirements
- Highly scalable platform delivers very low cost per subscriber

## Applications

- Carrier-grade switch for suburban, rural and remote service areas
- Ideal solution for cap-and-grow environment
- Local, tandem, ISDN, Centrex and long distance calling
- GR-303 host for remote access nodes including wireless local loop equipment

## Features

- Scales up to 100,000 subscribers
- Supports LNP, 800 calling, operator services, and CALEA on-switch
- Supports IP Endpoints and interoffice IP connections
- Supports a comprehensive set of Class 5 end office and Tandem features and a suite of revenue generating CLASS, Custom and next-generation services
- Low power consumption and ultra compact footprint mountable on 23" open rack
- Supports standardized protocols and open interfaces
- Supports basic and enhanced 911 services
- RUS accepted



# Technical Specifications

## 1. Protocol Support

IP Protocols: BICC, MEGACO, MGCP, SIP/SIP-T, SigTran, TCP, UDP, RTP, RTCP  
SS7 Protocols: ANSI and ITU/ETSI, Q.767, ISUP, TCAP variants, IS-41, GSM  
ISDN Protocols: Q.931 PRI, GR-1268 PRI, ETSI PRI  
CAS Protocols: FG-D, CAMA MF, line or trunk supervision, DTMF  
GR-303 interface  
GR-1298/1299 AIN 0.2 compliance  
AIN 0.1 for LNP and 800 services

## 2. Redundancy

1:1 system processor and switch fabric redundancy  
1:N I/O module redundancy

## 3. Call Handling

450,000 BHCA  
80,640 TDM DS0 ports, protected  
21,504 VoIP DS0 ports, protected  
G.711, G.726, G.729a/b, G.723.1, T.38 fax relay, echo cancellation (128 msec tail)

## 4. On-Switch Database

A high capacity (more than 100,000 subscribers) flexible database to store subscribers, features, and routing information for both tandem and Class 5 applications

## 5. Operations

PlexView® Element Management System supports provisioning, performance monitoring, and fault management  
Billing: GR-1343 AMA interface, GR-1100 BAF or ASCII CDRs  
Order Entry: manual or automated service order execution  
Traffic Analysis and Reporting with customized report building  
4000 seconds of announcements on-switch  
Call Progress Tones on switch  
3-way conferencing on-switch  
CALEA support on-switch

## 6. Input/Output Support

28-port DS1, channelized: SF, ESF, B8ZS, AMI  
28-port E1 channelized: CRC4, HDB3  
3-port DS3/STS-1, channelized: VT1.5 or M13/C-Bit mapped, B3ZS  
8-port DS3/STS-1, channelized: VT1.5 or M13/C-Bit mapped B3ZS  
Triple OC-3, channelized: VC-1.5 or M13  
Triple STM-1 channelized: VC-12  
Quad 1000 Mbps Ethernet module with either: quad 1000 base-T, quad 1000 base-LX, single mode or SX multi-mode interface using standard GBIC modules

## 7. Physical

24.5" H x 21.5" W x 18" D including cabling  
180 lbs, fully loaded  
-40 to -56.7 Vdc, 1450 watts fully loaded  
NEBS CO and ETSI compliant operating environment  
Redundant BITS timing support with internal Stratum 3 sources  
CE and UL certified

To learn more about our comprehensive portfolio, please contact your Lucent Technologies Sales Representative or:

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